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Commentary

Diabetes mellitus: Health and wealth threat

Diabetes mellitus is a major and rapidly growing public health care problem. It is increasing in incidence, and brings with it long term complications. Presently, more than 200 million people have diabetes mellitus; by 2030, it is estimated that approximately 366 million will develop diabetes mellitus [1], and more than one third of diabetes victims are unaware that they have this disease. Over the last few decades, science and technology have dramatically revolutionized living standards, providing a luxurious life with remote control activities. Significant changes have been observed in the lifestyle of both the rural and urban population. Through this modernization and change, people are eating more, and engage in less physical activity; this contributes substantially to the development of diabetes mellitus, and indeed, is fuelling an epidemic. The ten countries estimated to have the highest number of people with diabetes by 2030 are India, China, USA, Indonesia, Pakistan, Brazil, Bangladesh, Japan, Philippines and Egypt [2]. In spite of marvelous advancements in medicine, diabetes science and technology, diabetes mellitus remains an incurable, life-long disease. It involves multiple systems, with wide ranging and devastating complications, which may lead to severe disability, and is a prime cause of excess morbidity and mortality. Among the major complications of diabetes mellitus are retinopathy with potential loss of vision, nephropathy leading to renal failure, peripheral neuropathy with risk of foot ulcers, amputations, and charcot joints, autonomic neuropathy causing gastrointestinal, genitourinary, cardiovascular symptoms and sexual dysfunction. Patients with diabetes have an increased incidence of atherosclerotic cardiovascular, peripheral arterial and cerebrovascular disease.

Not only does diabetes mellitus affect the health of a large population all over the world, but it gravely affects the world's economy. Worldwide estimates suggest that the annual direct medical cost of diabetes is at least US$ 129 billion, and may be as high as US$ 241 billion, or 2.5–15.0% of global annual health care budgets [3]. Moreover, almost three million people each year, and about six people per minute, die worldwide due to the complications of diabetes mellitus [1]. Undeniably, diabetes mellitus is a leading health and wealth risk all over the world. Therefore, the sincere plea to the international health organizations and officials is that they should encourage further research in beta cell replacement strategies, and human embryonic stem cells [4]. In addition to enhancing research and the usual methods of treatment, intervention in hospital programs by adopting physiological measures and diabetes education support programs may also help to minimize the burden of this devastating disease. Moreover, electronic and print media sources should be fully utilized, in order to increase the awareness of the risk factors of diabetes mellitus, to develop understanding and control, and to promote better management and health care policies in order to improve the quality of, and access to diabetes care.

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Sultan Ayoub Meo
Clinical Physiology, Department of Physiology (29),
College of Medicine,
King Khalid University Hospital,
King Saud University, P.O. Box 2925,
Riyadh 11461, Saudi Arabia
Tel.: +966 1 4671604; fax: +966 1 4672567
E-mail addresses: sultanmeo@hotmail.com, smeo@ksu.edu.sa

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